AMENDMENTS TO THE CLAIMS

Please amend the claims of the present application as set forth below. Changes to the claims are shown by strikethrough (for deleted matter) or underlining (for added matter).

Claim History Summary:

Claims 1-19 were originally filed.

In an Office Action of July 20, 2004, the Office allowed claims 10-17; objected to claims 8, 9 and 19; and rejected claims 1-7 and 18.

In response, Claims 1, 8, 9, 18 were 19 amended; original claims 8, 9 and 19 (including prior dependencies) were represented as new claims 20, 21 and 22, respectively; and new claims 23-25 were added (pertaining to the subject matter of original claims 5-7, respectively).

In an Office Action of February 17, 2005, the Office allowed claims 10-17 and 20-22, objected to claims 8, 9 and 19 and rejected claims 1-7, 18 and 23-25.

Summary of Present Response

Claims 1, 9, and 18 are currently amended.

Claims 8 and 19 are canceled.

Claims 1-7, 9-18 and 20-25 are thus currently pending.

Detailed Listing of All Claims 1-25:

1 (Currently amended). A turbocharger assembly comprising:

a turbine housing;

a turbine wheel rotatably disposed within the turbine housing and attached to a shaft;

a center housing connected to the turbine housing and carrying the shaft;

a compressor housing attached to the center housing;

a compressor rotatably disposed within the compressor housing and attached to the shaft, the compressor comprising two impellers in back to back orientation with one another, the compressor housing including at least one air inlet for directing air into the compressor housing and to the compressor impellers; and

means for restricting a passage for air flow wherein the passage is positioned between a compressor impeller and a volute and wherein the means for restricting comprises an annular member that is movably disposed within the compressor housing.

2 (Original). The turbocharger assembly as recited in claim 1 wherein the compressor housing includes two separate air inlets that are in air flow communication with respective compressor impellers.

3 (Original). The turbocharger assembly as recited in claim 2 wherein the air inlets are oriented to receive air axially with respect to the compressor.

4 (Original). The turbocharger assembly as recited in claim 2 wherein the air inlets are oriented to receive air radially with respect to the compressor.

5 (Original). The turbocharger assembly as recited in claim 1 wherein the compressor housing comprises a single common air inlet that is in air flow communication with respective compressor impellers.

6 (Original). The turbocharger assembly as recited in claim 5 wherein the air inlet is oriented to receive air axially with respect to the compressor.

7 (Original). The turbocharger assembly as recited in claim 5 wherein the air inlet is oriented to receive air radially with respect to the compressor.

8 (Canceled).

9 (Currently amended). The turbocharger assembly as recited in claim ~~8~~ 1 wherein the annular member is movably disposed within a wall section of the compressor housing and is positioned to restrict the flow of pressurized air from one of the compressor impellers when placed in an actuated position.

10 (Original). A turbocharger assembly comprising:

a turbine housing;

a turbine wheel rotatably disposed within the turbine housing and attached to a shaft;

a center housing connected to the turbine housing and carrying the shaft;

a compressor housing attached to the center housing;

a compressor rotatably disposed within the compressor housing and attached to the shaft, the compressor comprising two impellers in back to back orientation with one another, the compressor housing including at least one air inlet in air flow communication with each of the compressor impellers; and

an annular member moveably disposed within a wall cavity of the compressor housing downstream of the compressor for controlling the flow of pressurized air from one of the compressor impellers when placed in an actuated position.

11 (Original). The turbocharger assembly as recited in claim 10 wherein the compressor housing includes two separate air inlets that are in air flow communication with respective compressor impellers.

12 (Original). The turbocharger assembly as recited in claim 11 wherein the air inlets are arranged to receive air axially into the compressor housing with

respect to the compressor, and are in communication with separate air passages within the compressor housing that are each in air flow communication with respective compressor impellers.

13 (Original). The turbocharger assembly as recited in claim 11 wherein the air inlets are oriented to receive air radially with respect to the compressor, and are in communication with separate air passages within the compressor housing that in air flow communication with respective compressor impellers.

14 (Original). The turbocharger assembly as recited in claim 10 wherein the compressor housing comprises a single common air inlet that is in air flow communication with respective compressor impellers.

15 (Original). The turbocharger assembly as recited in claim 14 wherein the air inlet delivers air axially into the compressor housing with respect to the compressor, and is in communication with two concentrically arranged air passages that are each in air flow communication with respective compressor impellers.

16 (Original). The turbocharger assembly as recited in claim 14 wherein the air inlet delivers air radially into the compressor housing with respect to the

compressor, and is in communication with two air passages that are each in air flow communication with respective compressor impellers.

17 (Original). A turbocharger assembly comprising:

a turbine housing;

a turbine wheel rotatably disposed within the turbine housing and attached to a shaft;

a center housing connected to the turbine housing and carrying the shaft;

a compressor housing attached to the center housing;;

a compressor rotatably disposed within the compressor housing and attached to the shaft, the compressor comprising two impellers in back to back orientation with one another, the compressor housing having a volute positioned concentrically around the compressor and including a single air inlet that is in air flow communication with two concentrically oriented air flow passages, each air flow passage being in air flow communication with respective compressor impellers; and

an annular member moveably disposed within a wall cavity of the compressor housing interposed between the compressor and the volute for controlling the flow of pressurized air from one of the compressor impellers when placed in an actuated position.

18 (Currently amended). A method for providing pressurized air for combustion by an internal combustion engine, the method comprising:

directing exhaust gas from the internal combustion engine to a turbine housing of a turbocharger to rotate a turbine wheel rotatably disposed therein, wherein the rotation of the turbine wheel causes a compressor to also rotate within a compressor housing;

directing air into the compressor housing and to the compressor, the compressor comprising two back to back oriented impellers to produce pressurized air; and

restricting a passage for air flow wherein the passage is positioned between a compressor impeller and a volute depending on the operating conditions of the internal combustion engine and wherein the step of restricting comprises actuating an annular member that is movably disposed within the compressor housing to project into the passage for air flow.

19 (Canceled).

20 (Previously presented). A turbocharger assembly comprising:

a turbine housing;

a turbine wheel rotatably disposed within the turbine housing and attached to a shaft;

a center housing connected to the turbine housing and carrying the shaft;

a compressor housing attached to the center housing;

a compressor rotatably disposed within the compressor housing and attached to the shaft, the compressor comprising two impellers in back to back orientation with one another, the compressor housing including at least one air inlet for directing air into the compressor housing and to the compressor impellers; and

means for controlling the flow of air within the compressor housing wherein the means for controlling comprises an annular member that is movably disposed within the compressor housing, and that is positioned downstream of the compressor to control the flow of pressurized air within the compressor.

21 (Previously presented). The turbocharger assembly as recited in claim 20 wherein the annular member is movably disposed within a wall section of the compressor housing and is positioned to control the flow of pressurized air from one of the compressor impellers when placed in an actuated position.

22 (Previously presented). A method for providing pressurized air for combustion by an internal combustion engine, the method comprising:

directing exhaust gas from the internal combustion engine to a turbine housing of a turbocharger to rotate a turbine wheel rotatably disposed therein,

wherein the rotation of the turbine wheel causes a compressor to also rotate within a compressor housing;

directing air into the compressor housing and to the compressor, the compressor comprising two back to back oriented impellers to produce pressurized air; and

controlling the flow of pressurized air exiting the compressor housing from at least one of the impellers depending on the operating conditions of the internal combustion engine wherein the step of controlling comprises actuating an annular member that is movably disposed within the compressor housing to project into an air flow path downstream of the compressor.

23 (Previously presented). A turbocharger assembly comprising:

a turbine housing;

a turbine wheel rotatably disposed within the turbine housing and attached to a shaft;

a center housing connected to the turbine housing and carrying the shaft;

a compressor housing attached to the center housing;

a compressor rotatably disposed within the compressor housing and attached to the shaft, the compressor comprising two impellers in back to back orientation with one another, the compressor housing including at least one air inlet for directing air into the compressor housing and to the compressor impellers; and

means for controlling the flow of air within the compressor housing wherein the compressor housing comprises a single common air inlet that is in air flow communication with respective compressor impellers whereby air entering the air inlet is bifurcated and directed by the compressor housing to one compressor impeller from a first direction and to the other compressor impeller from a second substantially opposing direction.

24 (Previously presented). The turbocharger assembly as recited in claim 23 wherein the air inlet is oriented to receive air axially with respect to the compressor.

25 (Previously presented). The turbocharger assembly as recited in claim 23 wherein the air inlet is oriented to receive air radially with respect to the compressor.